MARINE CHEMIST CERTIFICATE SERIAL NO. B134501

MARINE CHEMISTS, INC. OF TEXAS P. O. Bex 3502 Seasoners, Texas 77704 (409) 832-8409, 985-4822, 866-4223 W. B. Hataray 537 K. L. Marcor 577

SBA S. Y.	STEURRY IRA	NSPORTATION	5-8-85
	Vessel Owner or Agent	SBA)	Date
ELIZABETH S	PANK PARG	e SBA	JENNINGS, LA
70000	Type of Vessel	0.0	Specific Location of Vessel
ASPAHLT Last Three (3) Cargoes	Test Method	en.	Time Survey Completed
BOW RAKE - HYD	DALLIS ALL ON	11/25-2- SAF-	FR Whom so
is on white high	ATTOCKTE OTH ON	00/11/	A COUNTAIN
CARGO TAVKS	n 0/	-	
1-2-3-4-5 P/5- C) KLIL - ASAMALT BO	TTOMS - JAFE F	R LOORKERS
	AFE FOR HOTWORK	FR DECK P	ENETRATIONS
	17H FIRE WATCH		FIRE HOSE
01	V STAND-BY.		
1 4			
WING VOID D.B."			
No.1P: 3 P/5 -	ObLEL. HSPHA.	47 BUTTOMS-	AFE FOR WORKER
No.1 P. 3 P. 15 - No.1 P. 3 P. 15 - No.1 5 - 0 % LEL : 50	ME HEATTH COM OF	LON BOTTOM-	AFE FOR WORKED
1 3/2 00/	Au B	1/-1-722	+ 11 N5 50 50
NO. 2715-01022	- COME 1/4/ 1007/0	MS - VENTICA.	MALLON
7-9-	FIR ENTRY		
No. 2 P/5 - 0% LEL Pump Room - SAFE +	ER WORKERS - CO	FERDAMS 4 1- IN	VE TER WORKER'S
DuBLE BOTTOMS & V	um (com -) AFE	TOR THE THURK	10 WELD
FIRE WATCH WITH CHAI	UPPORT TOR URILLON.	EXTERNAL BOTT	OM SHELL PLATE
FIRE WATCH WITH CHAI	ROED FIRE HESE REG	DI DN STAXD-1	31
In the event of any physical or atmos	pheric changes adversely affecting the S ny doubt, immediately stop all work and	STANDARD SAFETY DESIGNAT	IONS assigned
QUALIFICATIONS: Transfer of ballast or mani subject to gas accumulation, unless specifically	pulation of valves or closure equipment ten	ding to alter conditions in pipe line	es, tanks or compartments
affected. All lines, vents, heating coils, valve designated.	s, and similarly enclosed appurtenances s	hall be considered "not safe" un	less otherwise specifically
STANDARD SAFETY DESIGNATIONS (partial list,		and the second s	
SAFE FOR WORKERS: Means that in the compa that, (b) toxic materials in the atmosphere are wit	thin permissible concentrations; and that, (c)	the residues are not capable of prod	19.5 percent by volume; and ucing toxic materials under
existing atmospheric conditions while maintained NOT SAFE FOR WORKERS: Means that in the			ot been met.
SAFE FOR HOT WORK: Means that in the comption of inerted spaces or where external hot work is	artment so designated: (a) oxygen content of the	ne atmosphere is at least 19.5 percen	t by volume, with the excep-
the lower flammable limit; and that, (c) the residue conditions in the presence of fire, and while mainte ing contained flammable or combustible materials tanks or lube oil tanks or engine room or fire roon	es are not capable of producing a higher conce ained as directed on the Marine Chemist's Cert is have been cleaned sufficiently to prevent the	entration than permitted by (b) above lificate; and further, that, (d) all adjace spread of fire, or are satisfactorily in	under existing atmospheric ent spaces containing or hav- nerted, or, in the case of fuel
NOT SAFE FOR HOT WORK: Means that in the			
SAFE FOR REPAIR YARD ENTRY: Means that t sampling at remote sampling stations, and results or (b) are inerted.	he compartments and spaces of the flammabl indicate the atmosphere to be above 19.5 percent	e cryogenic liquid carrier so designa ent oxygen, and less than 10 percent of	ated: (a) have been tested by of the lower flammable limit,
CHEMIST'S ENDORSEMENT. This is to certify that of Gas Hazards on Vessels and have found the co			with NFPA 306-1980 Control
"The undersigned acknowledges receipt of this Certificate und and understands conditions and limitations under which it wa	der Section 2-3 of NFPA 306-1980 This Certificate completed and	e is based on conditions existing at the time is issued subject to compliance with all q	ne the inspection herein set forth was

20M-2-83-AP

Signed.

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

Certificate No.

MARINE CHEMIST CERTIFICATE

SERIAL NO. D 46226

Survey Requested by	STED Wessel Owner or Agent	1-7-87 Date
STC 008	TRAK BARGE Type of Vessel	SBA /JENNINGS, LA.
Vessel		
Last Three (3) Cargoes	Oz/LEL/VISIL	Time Survey Completed
	NTHATION REGULED IN	
BOW RAKE		4
STERN RAKE		
AFTER HOTOIL TA	US P/S SAF	E FOR WORKERS
AFTER HOTOIL TAI	IL TANKS P/S / SAFE	FOR HOTWORK
ENGINE - BOILE	e Room	
200000000000000000000000000000000000000		
DOUBLE BOTTON	75	
No. 1 & 2. P/	MS - SAFE FORWORKERS	SAFE FOR HOTWORK
CAPRO TANKS	SAFE FOR WOR	KERS - SAFE FOR HOTWORK
No. 1-2-3-4	PIS FIREWATCH WI	TH CHARGED FIREHOSE
7401 / 2 0 1	PERMIRED AT	WORK LOCATION.
DEAN HOT ALL TA	VK- OH- NOT SAFE FOR	HOTWORK.
14= 011 1:115	SAFE FOR HOTWORK	
1 OIL COILS	THE FOR HOWARD TO BUR	V BOLTS, AND DROP VALUES
CARGO KINES - S.	THE TOK HOTWOOK TO TOKK	or ou luist.
	SO THEN SAFE FOR HOTELD.	
11-7-10 WELLS (2).	NOT SAFE FOR HOTWO	ek 1506/160 -

QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 1-6.1 through 1-6.4, and Subsection 5-3.2).

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-3 of NFPA 306 and understands conditions and limitations under which it was issued."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions

Signed_

-8/ Signed

(409) 832-6409, 866-4822, 866-422 W. B. HATAWAY 537 K. L. MERCER 53	23 W.O. # 1105	SERIAL NO. D 104245
S/3/A S. V. Survey Requested by	STEWART VRANS	57007 1710N 12-19-88
Survey Requested by		
AUNTIE MAME	Type of Vessel	SBA SENNINGS
1	Oz/LEZ/VISUAL	Specific Location of Vessel
Last Three (3) Cargoes	Test Method	Time Survey Completed
Bow RAKE 6	96 LEZ SAFE JOR 30.5E MAGNAKOTE	WORKERS
	905E MAGNAKOTE	ON BOTTOM

CARGO VANKS	,	
No. 1-2-3-4-5 1/-	5 - SAFE TOR WORK	1225 ,
	SAFE FOR HOTHORK	To BURN HOLES
A.	N DECK WITH FIRE	E RETARDANT
Cse	THE CLADER ALEMAN ?	O CHICH FIRE AND
	WATCH WITH CHARGE	
9 STA	WD-13Y.	
Tumo Room - L	JOSE SOFT ASPHALI	7-8665
COFFERDAM - So	FT /TSPHALT ON 1807	70m-01622
WING WOLDS No. 1-2	7-3 P/5- SOFT ASPE	ACT ON BOTTEN- OGLA
	1	
POUBLE BOTTOMS	- (1051-D & SE	CURED
FUEL TANKS- 1	242	=
In the event of any physical or atmospher	ric changes adversely affecting the STANDARD SAF	ETY DESIGNATIONS assigned to any of
	mediately stop all work and contact the undersigned	
ject to gas accumulation, unless specifically app	tion of valves or closure equipment tending to alter cond proved in this Certificate, requires inspection and endor	sement or reissue of Certificate for the spaces
so affected. All lines, vents, heating coils, valves designated.	s, and similarly enclosed appurtenances shall be cons	idered "not safe" unless otherwise specifically
	aphrased from NFPA 306 Subsections 1-6.1 through 1-6.4, and or space so designated: (a) the oxygen content of the atm	

SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met.

SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted.

CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-3 of NFPA 306 and understands conditions and limitations under which it was issued."

1. 10 / 10 / 10 / 10

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

MARINE CHEMIST CERTIFICATE

and is issued subject to compliance with all qualifications and instructions.

cev 5/1

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

Signed

MARINE CHEMIST CERTIFICATE SERIAL NO. E 54817 OF TEXAS MARINE CHEMISTS, INC. TEXAS 77704 BOX 3602 BEAUMONT, TEXAS 7770) 832-6409, 866-4822, 866-4223 P.O. (409) 832-6409, W. B. HATAWAY 537 K. L. MERCER 577 nand Vessel Owner or Agent Survey Requested by Specific Location of Vessel Type of Vessel Time Survey Completed Tests Performed Last Three (3) Cargoes FOR In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2) SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate. NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met. ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified. SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements. NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met. SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted. CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation. "The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued." This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions. Signed

20M-2-88

ONLY ON MARINE VESSELS

NOTE: THIS CERTIFICATE IS V

MAKING CHEMISTS, INC. OF P.O. BOX 3602 BEAUMONT, TEXAS 77704 MARINE CHEMIST CERTIFICATE (409) 832-6409, 866-4822, 866-4223 W.O. SERIAL NO. E 35491 B. HATAWAY 537 K. L. MERCER 577 Survey Requested by Vessel Owner or Agent WW65 6A Type of Vessel Specific Location of Vessel Last Three (3) Cargoes Tests Performed Time Survey Completed In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2) SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate. NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met. ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified. SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements. NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met. SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted. CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation. "The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is understands conditions and limitations under which it was issued. ssued subject to compliance with all qualifications and instructions

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

Signed

Marine Che

CHEMISTS, INC. MARINE P.O. BOX 3602 BEAUMONT, TEXAS 77704 (409) 832-6409, 866-4822, 866-4223 MARINE CHEMIST CERTIFICATE SERIAL NO. E 55214 W.01176 HATAWAY 537 K. L. MERCER 577 BA STEWART Survey Requested by Vessel Owner or Agent ANK RME Type of Vessel Specific Location of Vessel AR PM Last Three (3) Cargoes Tests Performed Time Survey Completed FOR WLORKEPS CAK 1107 In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2) SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate. NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met. ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified. SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements. NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met. SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted. CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation. "The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued." This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

_ Signed_

NOTE: THIS CERTIFICATE IS VALID ONLY ON MARINE VESSELS

CUSTOMER COPY

才豆

Printed in U.S.A.

20M-2-88

Signed Name

P.O. BOX 3602 BEAUMONT, TEXAS 77704 (409) 832-6409, 866-4822, 866-4223 MARINE CHEMIST CERTIFICATE SERIAL NO. E 55228 B. HATAWAY 537 K. L. MERCER 577 W.O. 1176 SBA Vessel Owner or Agent Survey Requested by ANKE MERMENT Type of Vessel Specific Location of Vessel NOON Last Three (3) Cargoes Tests Performed Time Survey Completed ATTEAS ZWIDED In the event of any physical or atmospheric changes adversely affecting the STANDARD SAFETY DESIGNATIONS assigned to any of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist. QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. STANDARD SAFETY DESIGNATIONS (partial list, paraphrased from NFPA 306 Subsections 2-3.1 through 2-3.5, and Subsection 6-3.2) SAFE FOR WORKERS: Means that in the compartment or space so designated: (a) the oxygen content of the atmosphere is at least 19.5 percent by volume; and that, (b) toxic materials in the atmosphere are within permissible concentrations; and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate. NOT SAFE FOR WORKERS: Means that in the compartment or space so designated, the requirements of Safe for Workers have not been met. ENTER WITH RESTRICTIONS: Means that in any compartment or space so designated, entry for work may be made only if conditions of proper protective equipment, clothing, and time are as specified. SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces containing or having contained flammable or combustible materials have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements. NOT SAFE FOR HOT WORK: Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met. SAFE FOR REPAIR YARD ENTRY: Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated: (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted. CHEMIST'S ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation. "The undersigned acknowledges receipt of this Certificate under Section 2-6 of NFPA 306 and understands conditions and limitations under which it was issued." This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions. # 537 90 Signed rollinge. Signed.

20M-2-88

MARINE CHEMIST, INC. OF P.O. BOX 3602 BEAUMONT, (409) 832-6409 396-482 W.B. HATAWAY 557 R.L. M. S.B. Survey Requested by	TEXAS 77784 2, 866-4223 W.O. A		ERIAL NO. F 23837
Survey Requested by ZRON MIKE	Vessel Owner or Agent		S BALTENINES LA
Vessel	Type of Vessel	/	Specific Location of Vessel
Last Three (3) Cargoes	Tests Performed	SUPL	Time Survey Completed
1 2 21 2 =	0/10		
No. 2 WING TAN		EFFER WO	
Henr Punp Rom	SAF	5 FER 167	WERK.
Pump Room INSET 1	N 16.35		
/) -	10	For Works	
CARGO TANK	* / _		
	JAFI.	FOR HOTTUG	rex
FIREWATCH WATH CH	MRGAD FIREHOSE	- REGUIRE	·D
Double Bornens L	In a Ban Ta		
San Salah Sahar San	NDER (MARY JUTAN)	3//	
	13	JAME 18	R WORKERS
No. 3 DAUBLE BO	70ms P/S	SAF15 F	R HOTWORK
FIRMATCH WIN	H CHARGED FIN	OFTHOSE RE	QUIRED.
= A (/a	min- Pin	0 0-11	Moex Trave
FORELIN FOR CITO	1/11-1-110/ 1254	VILLED IN	VVBCK IMM/C
	(mike	1000 (Fm)	
		A STATE OF THE STA	
	Hese Castit	inter are a	LL FOL.
ac baco	+ Baron	FAH WAS	Clours of
739	100011702	CT +	Ti con la Flin
400 Ho	F Wolle. For	L 210ward	Man pourse
Whech	War Sol	d. (Horry	. lo year
will	Exception A	Law Wil	e which was
Menamus -	4x- Wil	U Wame	
In the event of any physical or atmosph of the above spaces, or if in any doubt,	ieric changes adversely affecting the S immediately stop all work and contac	STANDARD SAFETY DESIGN. t the undersigned Marine Ch	ATIONS assigned to any emist.
QUALIFICATIONS: Transfer of ballast or ma ments subject to gas accumulation, unless:			
for the spaces so affected. All lines, vents otherwise specifically designated.	/ A		
STANDARD SAFETY DESIGNATIONS (partial list, p SAFE FOR WORKERS: Means that in the compartmen	nt or space so designated: (a) the oxygen content	of the atmosphere is at least 19.5 perc	cent by volume; and that, (b) toxic materials
in the atmosphere are within permissible concentration as directed on the Marine Chemist's Certificate.	ns; and that, (c) the residues are not capable of pro	ducing toxic materials under existing	atmospheric conditions while maintained
NOT SAFE FOR WORKERS: Means that in the comp ENTER WITH RESTRICTIONS: Means that in any cor			
time are as specified. SAFE FOR HOT WORK: Means that in the compartments			
or where external hot work is to be performed; and the (c) the residues are not capable of producing a higher of	nat, (b) the concentration of flammable materials concentration than permitted by (b) above under e	in the atmosphere is below 10 percexisting atmospheric conditions in the	ent of the lower flammable limit; and that, e presence of fire, and while maintained as
directed on the Marine Chemist's Certificate; and fu sufficiently to prevent the spread of fire, or are satisfact			
the Marine Chemist's requirements. NOT SAFE FOR HOT WORK: Means that in the com			
SAFE FOR REPAIR YARD ENTRY: Means that the co- sampling stations, and results indicate the atmosphere	re tested to be above 19.5 percent oxygen, and	less than 10 percent of the lower fla	mmable limit, or (b) are inerted.
CHEMIST'S ENDORSEMENT. This is to certify that in Vessels and have found the condition of each to be in	have personally determined that all spaces in the accordance with its assigned designation.	ne foregoing list are in accordance v	vith NFPA 306 Control of Gas Hazards on
"The undersigned acknowledges receipt of this Certificate under Sunderstands conditions and limitations under which it was issued."		te is based on conditions existing at the tin t to compliance with all qualifications and	ne the inspection herein set forth was completed and is instructions.
Sind Kallin In	alholl 117-30-	92 on 1 may 1/	Marca) 577
Signed Company NOTE:	THIS CERTIFICATE IS VALID ONL	Signed Marine Chemist Y ON MARINE VESSELS	Certificate No.
NO I C.			

20M-2-88

P.O. BOX 3602 BEAUDONT, TE	APA 3000 000 1011	EMIST CERTIFICATE
(409) 832-6409, 892-4822, W.B. HATAWAY 53, K.L. MERC	ER 377	SERIAL NO. F 23837
SBH S. Y. Survey Requested by	Vessel Owner or Agent	Date
Vessel /	Type of Vessel	Specific Location of Vessel
Last Three (3) Cargoes	Tests Performed	Time Survey Completed
No. 2 WING TANKS	P/S SAFE FOR W	ORKERS
HETER PLAN Room	SAFE FOR 140	NUGEK.
Pump Room INSET IN	No. 3,5	
CARGO TANK	JAFE FOR WORK	LIRS
	SAFE FOR HOTE	JORK
FIREWATCH WITH CHAR	CED FIREHESE REGUIR	<u>۲</u> ۵.
DOUBLE BOTTOMS HAL	DER GAD TANKS	
P/5) INFE	FOR WORKERS
No. 3 DOUBLE BOTT	oms p/s / SAFE	TOR HOTWORK
FIREWATCH WITH	CHARGED FIRETHOSE R.	EQUIRED.
FORCED AIR CLEATI	LATION REGULACIO IN	WORK TANK
	(MINI 1000 CFM)	
1 He	se Castificate are 6	ALL FOL-
- He phalt	Barger. That we	2 Cleans
to a Hot	work. For Stewart	- Vraw podebol
Which-	War Sold- (+pro	1. 6 year
	Coption of Jan M	ike which was
In the event of any physical or atmospheric of the above spaces, or if in any doubt, imm	changes adversely affecting the STANDARD SAFETY DESI ediately stop all work and contact the undersigned Marine	GNATIONS assigned to any Chemist.
QUALIFICATIONS: Transfer of ballast or manipul ments subject to gas accumulation, unless speci	lation of valves or closure equipment lending to alter condi ifically approved in this pertificate, requires inspection and	tions in pipe lines, tanks or compart- endorsement or reissue of Certificate
otherwise specifically designated.	ting colls, valves, and similarly enclosed appurtenances strased from NFPA 366 Sussections 2-3.1 through 2-3.5, and Subsection 6	
SAFE FOR WORKERS: Means that in the compartment or sp in the atmosphere are within permissible concentrations; and as directed on the Marine Chemist's Certificate.	ace so designal cd: (a) the oxygen content of the atmosphere is at least 19.5 I that, (c) the residues are not capable of producing toxic materials under exi	percent by volume; and that, (b) toxic materials sting atmospheric conditions while maintained
NOT SAFE FOR WORKERS: Means that in the compartme	ent or space so designated, the requirements of Safe for Workers have no ment or space so designated, entry for work may be made only if conditions	
time are as specified. SAFE FOR HOT WORK: Means that in the compartment so	designates: (a) oxygen content of the atmosphere is at least 19.5 percent b the concentration of flammable materials in the atmosphere is below 10	y volume, with the exception of inerted spaces
(c) the residues are not capable of producing a higher concer directed on the Marine Chemist's Certificate; and further,	ntration than permitted by (b) above under existing atmospheric conditions it that, (d) all adjacent spaces containing or having contained flammable of	n the presence of fire, and while maintained as or combustible materials have been cleaned
the Marine Chemist's requirements.	erted, or, in the case of fuel tanks or lube oil tanks, or engine room or fire room ent so designated, the requirements of Safe for Hot Work have not been	
sampling stations, and results indicate the atmosphere tester	tments and spaces of the flammable cryogenic liquid carrier so designate ed to be above 19.5 percent oxygen, and less than 10 percent of the lower	er flammable limit, or (b) are inerted.
CHEMIST'S ENDORSEMENT. This is to certify that I have Vessels and have found the condition of each to be in acco "The undersigned acknowledges receipt of this Certificate under Section		ice with NFPA 306 Control of Gas Hazards on the time the inspection herein set forth was completed and is
understands conditions and limitations under which it was issued."	issued subject to compliance with all qualifications	
Signed Name Company	Date Signed Marine Chemist	Certificate No